

Case No. 12-70079

**IN THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT**

PHYSICIANS FOR SOCIAL RESPONSIBILITY - LOS ANGELES, et al.,
Petitioners,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,
Respondent.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, et al.,
Intervenors.

On Petition for Review of Final Action of the
United States Environmental Protection Agency

**BRIEF FOR RESPONDENT UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY**

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GLOSSARY

Air District	South Coast Air Quality Management District
CARB	California Air Resources Board
CAA	Clean Air Act, 42 U.S.C. §§ 7401-7671a
EPA	United States Environmental Protection Agency
NAAQS	National Ambient Air Quality Standard
PM _{2.5}	Airborne Particulate Matter 2.5 microns or less in diameter
PM _{2.5} SIP	Revisions to the California SIP to provide for reasonable further progress and for attainment of the 1997 PM _{2.5} NAAQS within the South Coast nonattainment area
SIP	State Implementation Plan

STATEMENT OF JURISDICTION

I. AGENCY. The U.S. Environmental Protection Agency (“EPA”) approved the challenged revisions to the State Implementation Plan (“SIP”) for the State of California to bring the South Coast nonattainment area into attainment of the National Ambient Air Quality Standards for fine particulate matter (“PM_{2.5}”) by April 15, 2015 (“PM_{2.5} SIP”).

II. COURT. This Court has jurisdiction pursuant to Clean Air Act section 307(b)(1), 42 U.S.C. § 7607(b)(1), to review EPA’s final decision approving the PM_{2.5} SIP (“Final Decision”). To the extent the petition seeks review of the Final Decision itself, the petition is both timely and properly venued. However, as discussed *infra* at Section II.C hereof, to the extent it is challenging EPA’s rules regarding the placement of air quality monitors (codified at 40 C.F.R. Pt. 58), this Court lacks jurisdiction. Clean Air Act section 307(b)(1) plainly requires, and this Court expressly held in *NRDC v. EPA*, 638 F.3d 1183, 1190 (9th Cir. 2011), that such challenges to rules of nationwide effect must be brought within 60 days of their promulgation and then only in the United States Court of Appeals for the District of Columbia Circuit.

III. AGENCY DECISION APPEALED FROM. Natural Resources Defense Council, Physicians for Social Responsibility – Los Angeles, and Communities for a Better Environment (collectively “Petitioners”) challenge EPA’s Final Decision

approving the attainment demonstration within the PM_{2.5} SIP: Approval of Air Quality Implementation Plans; California; South Coast; Attainment Plan for 1997 PM_{2.5} Standards, 76 Fed. Reg. 69,928 (Nov. 9, 2011). Petitioners initiated this matter by filing a Petition for Review of the Final Decision on January 3, 2012.

STATEMENT OF THE ISSUES

1. Whether EPA reasonably approved the attainment demonstration for the South Coast's PM_{2.5} SIP when the control strategy therein relies on enforceable State commitments to take action on specified emission control measures on a fixed schedule and to achieve specified tons of emission reductions of PM_{2.5} and its chemical precursors by 2014 ("Enforceable Commitments").
2. Whether EPA reasonably approved the attainment demonstration for the PM_{2.5} SIP which, consistent with EPA's long-standing national regulations regarding the placement of air quality monitors codified at 40 C.F.R Part 58 ("Monitoring Rules") and related agency guidance, is not based upon air quality data collected in the vicinity of heavily-travelled South Coast roadways and highways.

ADDENDUM NOTICE

Cited statutes, regulations and rules are provided in a separately-bound addendum pursuant to Local Rule 28-2.7.

STATEMENT OF THE CASE

This case concerns EPA's final action approving in part and disapproving in part revisions to the California SIP designed to bring the South Coast nonattainment area into attainment of the 1997 annual and 24-hour National Ambient Air Quality Standards ("NAAQS") for fine particulate matter ("PM_{2.5} SIP") pursuant to section 110 of the Clean Air Act, 42 U.S.C. § 7410. APPROVAL OF AIR QUALITY IMPLEMENTATION PLANS; CALIFORNIA; SOUTH COAST; ATTAINMENT PLAN FOR 1997 PM_{2.5} STANDARDS, 76 Fed. Reg. 69,928 (Nov. 9, 2011) ("Final Decision").

In particular, Petitioners challenge EPA's approval of the attainment demonstration for the PM_{2.5} SIP ("Attainment Demonstration") because it relies in part on enforceable commitments by the California Air Resources Board and the South Coast Air Quality Management District to act on specific emission control measures on a fixed schedule, and to achieve reductions of specified tons of emissions of PM_{2.5} and its chemical precursors by 2014 ("Enforceable Commitments"). Petitioners contend that these commitments are merely unenforceable aspirational goals. However, the Enforceable Commitments impose detailed and nondiscretionary requirements that constitute means, techniques, schedules and timetables to provide for attainment authorized by CAA sections

110(a)(2)(A) and 172(c)(6), 42 U.S.C. §§ 7410(a)(2)(A), 7502(c)(6), that can be enforced by the public and by EPA.

Petitioners further challenge EPA's approval of the Attainment Demonstration on the grounds that it is not based on PM_{2.5} data collected in, and attainment-related computer modeling performed for, areas in the vicinity of heavily-travelled South Coast roadways and highways. However, neither the CAA, nor EPA's long-standing national regulations regarding the placement of air quality monitors ("Monitoring Rules") and related EPA guidance, require States to collect PM_{2.5} data or model attainment of the PM_{2.5} National Ambient Air Quality Standards in such areas. Moreover, to the extent Petitioners argue that the Monitoring Rules *themselves* are not adequately protective of human health and welfare, they assert an untimely and improperly-venued challenge to the Monitoring Rules that should be dismissed pursuant to CAA section 307(b)(1), 42 U.S.C. § 7607(b)(1).

The petition for review therefore should be denied.

STATEMENT OF THE FACTS

I. THE CLEAN AIR ACT AND AIRBORNE FINE PARTICULATE MATTER

The Clean Air Act (“CAA”) establishes, *inter alia*, a comprehensive national program to protect public health and welfare from the harmful effects of exposure to a series of ubiquitous air pollutants. *See generally* CAA section 101, 42 U.S.C. § 7401. The CAA and regulatory requirements germane to this case are: (1) annual and 24-hour national ambient air quality standards, or NAAQS, which are numeric air quality standards promulgated by EPA that specify the average concentration of pollutants, measured over the specified period of time, that cannot be exceeded in the ambient air; (2) the State Implementation Plans, or SIPs, that establish how States in which a NAAQS is exceeded will come into attainment by statutory deadlines; (3) attainment demonstrations within those SIPs that establish “target” emission levels for future years that will enable the area to timely attain the NAAQS at issue; and (4) “control strategies” within those attainment demonstrations that specify the already-adopted and implemented pollution control measures, and enforceable commitments to take future action on other such measures and achieve specified tons of emission reductions on a fixed schedule, that will enable the State to achieve the necessary emission reductions.

A. National Ambient Air Quality Standards

Clean Air Act section 108 requires EPA to identify air pollutants that “may reasonably be anticipated to endanger public health or welfare” and to issue “air quality criteria” reflecting the latest scientific knowledge regarding “all identifiable effects on public health or welfare” that may result from each such pollutant in the ambient air. 42 U.S.C. § 7408(a). Section 109 directs EPA to propose and promulgate “primary” and “secondary” NAAQS based on those air quality criteria to protect public health and welfare, respectively. *Id.* §§ 7409(b), 7602(h). EPA, with input from the States, determines which areas are not in attainment with each NAAQS and subsequently designates them as “nonattainment areas.” *Id.* § 7407(d)(1)(A)-(B), (d)(2)(A). Non-attainment areas must come into attainment by the applicable statutory deadline. *Id.* § 7502(a)(2).

1. The 1997 PM_{2.5} NAAQS

Fine particles in the atmosphere measuring less than 2.5 microns in diameter are referred to as PM_{2.5}.¹ In 1997, EPA established both an annual PM_{2.5} NAAQS of 15 µg/m³ and a 24-hour PM_{2.5} NAAQS of 65 µg/m³. 40 C.F.R. § 50.7(a).

¹ PM_{2.5} can be emitted directly into the atmosphere as a solid or liquid particle or can be formed in the atmosphere as a result of various chemical reactions from precursor emissions of nitrogen oxides (NO_x), sulfur dioxide (SO₂), volatile organic compounds (VOC) and ammonia. *See* 72 Fed. Reg. 20,586, 20,589 (April 25, 2007). In the action at issue, the terms “sulfur oxides” and SO_x are used for SO₂.

Nonattainment areas for the 1997 PM_{2.5} NAAQS must come into attainment “as expeditiously as practicable,” but no later than five years from the date they were designated, unless EPA extends that date for up to five additional years where certain conditions are met. 42 U.S.C. § 7502(a)(2)(A). The South Coast of California is a nonattainment area² for both the annual and the 24-hour 1997 PM_{2.5} NAAQS.³ *See* 40 C.F.R. § 81.305.

2. Demonstrating Attainment of the 1997 PM_{2.5} NAAQS

The 1997 NAAQS itself specifies that attainment is to be determined in accordance with 40 C.F.R. Part 50, Appendix N, which in turn refers to the regulations in 40 C.F.R. Pt. 58, Appendix D, that govern the placement of monitors to be used to compare actual emissions in an area with the PM_{2.5} NAAQS (“Monitoring Rules”). 40 C.F.R. § 90.7(b), (c) (1997). Section 58.30(a)(1), to which that provision was transferred during the 2006 restructuring and amendment of the PM_{2.5} NAAQS, still provides that, “The PM_{2.5} monitoring site characteristics

² This nonattainment area comprises the Los Angeles-South Coast Air Basin, which includes Orange County, the southwestern two-thirds of Los Angeles County, southwestern San Bernardino County, and western Riverside County. 40 C.F.R. § 81.305; 76 Fed. Reg. at 69,928 n.1.

³ The revised PM_{2.5} NAAQS promulgated in 2006 is not at issue in this suit. All references to the PM_{2.5} NAAQS herein are to the 1997 NAAQS.

(see appendix D to this part, section 4.7.1) impact how the resulting PM_{2.5} data can be compared to the annual PM_{2.5} NAAQS form.” 40 C.F.R. § 58.30(a)(1) (2006).

Appendix D to 40 C.F.R. Part 58, which was restructured and amended by the 1997 and 2006 Monitoring Rules,⁴ imposes PM_{2.5}-specific requirements to ensure that States place monitors in a manner that meets the intended level of protection of public health of the NAAQS. The Monitoring Rules therefore require States to place and operate a minimum number of PM_{2.5} monitors at sites that represent “community-wide air quality” and use data collected there to determine attainment of the annual NAAQS. 40 C.F.R. Pt. 58, App. D, § 4.7.1(b)-(c); *id.* § 58.30(a)(1). Community-wide air quality sites are sites at the Neighborhood or Urban Scale;⁵ Neighborhood Scale sites are located within several-square-kilometer areas that have homogeneous PM_{2.5} concentrations and land surface characteristics, and often represent living and working conditions comparable to those in the areas where data was collected for the epidemiologic studies on which

⁴ Revised Requirements for Designation of Reference and Equivalent Methods for PM_{2.5} and Ambient Air Quality Surveillance for Particulate Matter; Final Rule, 62 Fed. Reg. 38,764 (July 18, 1997) (1997 Monitoring Rule); Revisions to Ambient Air Monitoring Regulations; Final Rule, 71 Fed. Reg. 61,236 (Oct. 17, 2006) (2006 Monitoring Rule).

⁵ An exception exists “where population-oriented micro- or middle-scale PM_{2.5} monitoring [sites] [sic] are determined by the [EPA] Regional Administrator to represent many such locations throughout a metropolitan area,” however no such finding has been made for the South Coast. 40 C.F.R. Pt. 58, App. D, § 4.7.1(b).

the NAAQS were based. 40 C.F.R. Pt. 58, App. D, § 4.7.1(c)(3) (PM_{2.5}-specific definition of Neighborhood Scale); *see* 71 Fed. Reg. at 61,264; 62 Fed. Reg. at 38,767/3-68/1.⁶

States are not required to place any PM_{2.5} monitors in Microscale and Middle Scale sites—smaller areas that may be located in the vicinity of traffic corridors and heavily-travelled roadways:

Microscale—This scale would typify areas such as downtown street canyons and traffic corridors where the general public would be exposed to maximum concentrations from mobile sources. . . .

Middle Scale—People . . . living near major roadways, encounter particle concentrations that would be adequately characterized by this spatial scale.

40 C.F.R. Pt. 58, App. D, § 4.7.1(c)(1), (2). Moreover, data collected in Microscale and Middle Scale areas are normally eligible for use only to determine attainment of the 24-hour NAAQS, but not for attainment of the annual NAAQS.⁷

40 C.F.R. § 58.30(a)(1); *see* 71 Fed. Reg. 61,144, 61,164 (Oct. 17, 2006). Only in

⁶ Federal Register citations herein specify the column in which cited material may be found by including “/#” following the page numbers.

⁷ The PM_{2.5} NAAQS was established to “reduce aggregate population risk from both long- and short-term exposures by lowering the broad distribution of PM_{2.5} concentrations across the community.” 62 Fed. Reg. 38,652, 38,671/2 (July 18, 1997); *see* 38,765/1; 40 C.F.R. Pt. 58, App. D, § 2.8.1.2.3 (1997). When EPA amended the Monitoring Rules in 2006, the Agency responded to public comments seeking mandatory monitoring in the vicinity of highways and heavily-travelled roadways (*i.e.*, Middle Scale and Microscale areas) by expressly declining to require such monitoring on the grounds that it was inconsistent with the community-oriented, area-wide protection the NAAQS was intended to provide. *See* 71 Fed. Reg. at 61,264 (2006).

cases where an EPA Regional Administrator specifically determines that certain Microscale or Middle Scale monitoring sites collectively identify a larger region of localized high ambient PM_{2.5} concentrations, may data from such sites be used to determine attainment of the annual PM_{2.5} NAAQS. 40 C.F.R. § 58.30(a)(2); *see also* 76 Fed. Reg. at 69,946/3; 62 Fed. Reg. at 38,780/1-2. No such determination has been made for the South Coast. ER-330.⁸

B. State Implementation Plans

Nonattainment areas must develop SIPs that specify, *inter alia*, how they will attain the NAAQS by the applicable statutory deadline. 42 U.S.C. § 7410(a). SIPs for the 1997 PM_{2.5} NAAQS include: (1) a “base year” inventory of actual emissions of PM_{2.5} and PM_{2.5} precursors during a recent calendar year; (2) an attainment demonstration that, *inter alia*, establishes target emission levels for future years that will enable the area to attain the NAAQS by the statutory deadline; (3) a reasonable further progress demonstration showing that emissions will be reduced throughout the nonattainment period to achieve “generally linear progress” toward attainment; and (4) a control strategy (an element of the attainment demonstration) that may include emission limits and other control measures, including enforceable commitments to act on future control measures

⁸ EPA cites to a more complete set of excerpts from the Technical Support Document for the Final Decision in Respondent’s Excerpts of Record. *See* ER-209-349.

and achieve specified tons of emission reductions on fixed schedules, and other strategies that will timely achieve the emission reductions needed for attainment. 42 U.S.C. §§ 7410(a)(2)(A), 7501(1), 7502(c); 40 C.F.R. §§ 51.100(n), 51.1007-1009; *see* 76 Fed. Reg. at 69,939/2.

1. Emissions Reduction Gaps

When developing a PM_{2.5} SIP, a State first identifies the levels of emissions of PM_{2.5} and its chemical precursors during a recent calendar year (“Base Year Inventory”) from all sources of such pollutants in the nonattainment area, and then calculates emission inventories for future years using computer models and other methodologies that predict future emission levels. 76 Fed. Reg. at 69,931/2-32/1; 42 U.S.C. § 7502(c)(3). The State then compares the future baseline inventories to the emission levels necessary to attain the NAAQS and demonstrate reasonable further progress towards attainment, to see by what amount, if any, future emissions must be reduced (“Emissions Reduction Gap”). Any Emissions Reduction Gap is addressed by the control strategy in the SIP. *See BCCA Appeal Group v. EPA*, 355 F.3d 817, 823 (5th Cir. 2005).

2. Control Strategies

When developing SIPs, the States have “broad authority to determine the methods and particular control strategies they will use to achieve the statutory requirements.” *BCCA*, 355 F.3d at 822 (citing *Union Elec. Co. v. EPA*, 427 U.S.

246, 266 (1976) (“So long as the national standards are met, the state may select whatever mix of control devices it desires.”)); 76 Fed. Reg. at 69,932/3. Where already-adopted and implemented control strategies and control measures are not sufficient to address the full Emissions Reduction Gap—that is, the difference between the future baseline inventories and the emission levels necessary to attain the NAAQS and demonstrate reasonable further progress toward attainment—States may address the remainder of the necessary emission reductions through enforceable commitments to act on future control measures or to achieve specific tons of emission reductions by specific deadlines, provided those commitments satisfy EPA’s three-part inquiry to establish that they fulfill the CAA’s requirements. 42 U.S.C. §§ 7410(a)(2)(A), 7502(c)(6); 76 Fed. Reg. at 69,933/2; *BCCA*, 355 F.3d at 838-39 & n.25, 840-41 & n.31; *Env’tl. Def. v. EPA*, 369 F.3d 193, 209 (2d Cir. 2004).

3. State Adoption and EPA Approval of SIPs and SIP Revisions

States must formally adopt SIPs or SIP revisions through state-level notice-and-comment rulemakings, and then submit them to EPA for approval. 42 U.S.C. § 7410(a). Once EPA approves a SIP or SIP revision, also through notice-and-comment rulemaking, it becomes binding on the State and regulated entities therein, and is enforceable as federal law under the CAA. *Id.* §§ 7413, 7602(q)

(definition of “applicable implementation plan”), 7604(a); 5 U.S.C. § 553.⁹ It also cannot be modified, except through an EPA notice-and-comment rulemaking consistent with the requirements of CAA section 110(l). 42 U.S.C. § 7410(l); 40 C.F.R. § 51.105.¹⁰

4. Enforcement of SIP Requirements, Including Enforceable Commitments

EPA-approved SIP requirements are enforceable by the public and EPA pursuant to numerous CAA provisions including CAA section 304(a), which authorizes citizen suits. 42 U.S.C. § 7604(a); *see Bayview*, 366 F.3d at 695; *BCCA*, 385 F.3d at n.25; 76 Fed. Reg. at 69,942; *infra* at 43-45. The public may enforce a SIP’s strategies and means for reducing emissions (*e.g.*, enforceable commitments, specific control measures) through citizen suits, but not its “aspirational goals,” such as the general duty to attain a NAAQS by the statutory deadline.¹¹ Citizen suit claims are ripe when a specific, EPA-approved SIP

⁹ *Sierra Club v. EPA*, 671 F.3d 955, 959 (9th Cir. 2012) (citing *Safe Air for Everyone v. EPA*, 488 F.3d 1088, 1096 (9th Cir. 2007)); *El Comite Para El Bienestar De Earlimart v. Warmerdam*, 539 F.3d 1062, 1066 (9th Cir. 2008); *Bayview Hunter’s Point Comty. Advocates v. Metro. Transp. Comm’n*, 366 F.3d 692, 695 (9th Cir. 2004).

¹⁰ *Sierra Club*, 671 F.3d at 959 (citing *Safe Air*, 488 F.3d at 1096); *Coal. for Clean Air v. S. Coast Air Quality Mgmt Dist.*, No. CV97-6916, 1999 WL 33842864, at *1 (C.D. Cal. Aug. 27, 1999).

¹¹ *Sierra Club*, 671 F.3d at 959; *Bayview*, 366 F.3d at 701, 703 (citing *Trustees for Alaska v. Fink*, 17 F.3d 1209, 1212 (9th Cir. 1994); *see* ER-277).

strategy or means for reducing emissions (*e.g.*, an enforceable commitment) is actually violated. *Bayview*, 366 F.3d at 703; *Trustees for Alaska*, 17 F.3d at 1212; *Coal. Against Columbus Ctr. v. New York*, 967 F.2d 764, 769 (2d Cir. 1992).

EPA is empowered to enforce SIP provisions through administrative orders, civil penalty orders, sanctions or civil actions, and EPA can make a finding of failure to implement a SIP when a State fails to fulfill its commitments under that SIP, triggering mandatory sanctions if the violation is not remedied within 18 months. 42 U.S.C. §§ 7413, 7509; *see BCCA*, 355 F.3d at n.25; 76 Fed. Reg. at 69,942/1; ER-277. In the event of pervasive non-enforcement of a SIP, EPA also may take over that State's enforcement of its SIP provisions. 42 U.S.C. § 7413(a)(2). In addition, where EPA finds that a PM_{2.5} nonattainment area has failed to timely attain the PM_{2.5} NAAQS, the State is required to submit a revised SIP addressing the deficiencies within the plan within 12 months of such finding. *Id.* § 7509(d).

II. THE SOUTH COAST'S PM_{2.5} STATE IMPLEMENTATION PLAN REVISIONS

In 2007, California submitted SIP revisions to address the South Coast's nonattainment of the 1997 PM_{2.5} NAAQS. *See* 76 Fed. Reg. at 69,928/2-3 & n.2. This submittal comprised two documents: one prepared by the California Air Resources Board, or CARB, a state agency that regulates mobile sources on a state-wide basis; and one prepared by the South Coast Air Quality Management

District (“Air District”), a local agency that regulates other sources within the South Coast nonattainment area. The submittal included emissions inventories that established that the South Coast could not attain the 1997 PM_{2.5} NAAQS using only already-adopted strategies and control measures,¹² and an Attainment Demonstration that included a control strategy to address the resulting Emissions Reduction Gap (“Control Strategy”).

A. California’s Initially-Submitted Control Strategy

The Control Strategy, as initially submitted, attributed most of the emission reductions necessary for attainment to previously-adopted emission control measures. *Id.* at 69,944/1, 69,950 (below Table 4)-951/1; ER-299, 305, 345. The remaining reductions were attributed to enforceable commitments that obligated the Air District and CARB to: (1) take action with respect to lists of specific emission control measures (“Listed Measures”) with corresponding emission reduction targets by specified deadlines (“Control Measure Requirements”); and (2) actually achieve by 2014 specified tons/day of reductions of PM_{2.5}, SO_x, NO_x and VOC (“Tonnage Requirements”). 76 Fed. Reg. at 69,944/1, 69,948-49/1 & Tables 1, 2.

The Listed Measures were intended to be the means by which most, if not all, of the Tonnage Requirements would be achieved by 2014. *Id.* at 69,944/1-

¹² 76 Fed. Reg. at 69,933/2, 69,942/1-2, 69,944/1-2.

45/1; ER-293, 345. To ensure that sufficient emission reductions would actually be *achieved* by 2014, the deadlines for the Air District's and CARB's Listed Measures were set between 2008 and 2012, and between 2007 and 2013, respectively. *Id.* at 69,948-49 (Tables 1, 2); ER-286-92 (Table F-5), 294-95 (Table F-6). Consequently, the Tonnage Requirements and the Control Measure Requirements cannot be considered in isolation from each other.

The Tonnage Requirements also are discrete requirements that must be satisfied through additional control measures, however, if the Listed Measures do not generate sufficient emission reductions. *Id.* at 69,944/1-45/1, 69,944/2 (“CARB’s and the District’s enforceable commitments to additional emissions reductions are expressed in aggregate tonnages and not tied to specific measures”); *see* ER-278-79 (Air District), 293 (CARB).

B. California’s Pre-Approval Performance of Enforceable Commitments

1. Control Measure Requirements

After making their initial submissions, CARB and the Air District took timely action with respect to their Listed Measures,¹³ and the Air District

¹³ For example, in 2008 the Air District adopted (among others) rules regarding woodburning fireplaces and wood stoves (Rule 445) and small industrial, institutional, commercial boilers, steam generators and process heaters (Rule 1146.1); in 2009 the Air District adopted a rule regarding NO_x reductions from space heaters (Rule 1111); and in 2010 adopted rules regarding consumer paint thinners and multi-purpose solvents (Rule 1143) and vanishing oils and rust

investigated additional control measures to generate reductions applicable to its Tonnage Requirements. *Id.* at 69,944/2-45/1; ER-278-79 (Air District), 293 (CARB). Consequently, by the time EPA approved the PM_{2.5} SIP in November 2011, CARB and the Air District each had acted on all but two or three of their Listed Measures, respectively, the deadlines for which had not yet passed. *Id.* at 69,948/3-49 & Tables 1, 2. Both agencies had therefore nearly fulfilled their proposed Control Measure Requirements more than three years *prior to* the South Coast's April 2015 attainment deadline.

2. Tonnage Requirements

California also continued gathering data regarding current and future emission sources, including additional emissions reductions from subsequently-adopted and EPA-approved control measures, non-economic data (*e.g.*, vehicle populations and load factors), and data regarding future emission-generating activity levels due to the unfavorable economic forecast. *Id.* at 69,930/1-2; ER-235.

inhibitors (Rule 1144). 76 Fed. Reg. at 69,948 (Table 1). In 2007, CARB acted on (among others) rules regarding smog check improvements, (footnote continued ...) expanded vehicle retirement, and modifications to its reformulated gasoline program; in 2008 CARB acted on rules accelerating the introduction of cleaner locomotives and enhanced vapor recovery for above-ground storage tanks; and in 2009 CARB acted on rules adding evaporative emission standards and consumer product programs. *Id.* at 69,949 (Table 2).

Based on this newer, more accurate information that was provided to EPA in a 2011 Progress Report, California determined that its future baseline inventories—particularly the 2014 Baseline Inventory—should be significantly lower than originally calculated. 76 Fed. Reg. at 69,930/2. From this information, EPA calculated an appropriate “adjustment” to the original 2014 Baseline Inventory, which correspondingly reduced the South Coast’s Emissions Reduction Gap. *Id.*; ER-235, 347; *see e.g., Sierra Club*, 671 F.3d at 967-68. The final Tonnage Requirements codified in the PM_{2.5} SIP therefore are:

State of California Air Resources Board . . .

(2) . . . Commitment to *achieve* the total emissions reductions necessary to attain the Federal standards in the South Coast air basin, which represent 6.1 tons per day (tpd) of direct PM_{2.5}, 38.1 tpd of SO_x, 33.6 tpd of VOC and 118.2 tpd of nitrogen oxides by 2014 for purposes of the 1997 PM_{2.5} NAAQS. . . .

. . . .

South Coast Air Quality Management District. . . .

(2) . . . Commitments to *achieve* emissions reductions (including emissions reductions of 2.9 tpd of direct PM_{2.5}, 2.9 tpd of SO_x, 10.4 tpd of VOC and 10.8 tpd of nitrogen oxides by 2014) . . .

40 C.F.R. §§ 52.220(c)(397)(ii)(A)(2) (CARB, emphasis added), (398)(ii)(A)(2) (Air District, emphasis added); *see* 76 Fed. Reg. at 69,944/1, 69,950 (text below Table 3 & Table 3).

By the time the PM_{2.5} SIP was approved in November 2011, additional control measures had been adopted and implemented that achieved substantial EPA-approved (and therefore SIP-creditable) emission reductions. 76 Fed. Reg. at

69,944/1-2, 69,950 (Table 4 & all text below Table 3), 69,951. Consequently, EPA determined that CARB and the Air District already had achieved the emission reductions necessary to satisfy the Tonnage Requirements, with the exception of: 1.0 ton per day (“tpd”) of direct PM_{2.5}, 25 tpd of VOC and 70 tpd of NO_x. 76 Fed. Reg. at 69,950 (text below Table 3 & Table 4 (Line D)). Therefore, as of the approval date for the PM_{2.5} SIP, California would fulfill the Tonnage Requirements once it achieved additional emission reductions comprising only 8% of the direct PM_{2.5}, 7% of the volatile organic carbons (VOC), and 11% of the remaining NO_x emission reductions needed for the South Coast to attain the 1997 PM_{2.5} NAAQS. 76 Fed. Reg. at 69,944/1, 69,950 (below Table 3) & Table 4 (line E); ER-307, 345.

III. EPA’S FINAL DECISION APPROVING THE PM_{2.5} SIP IN PART AND DISAPPROVING IT IN PART

On November 9, 2011, EPA published the Final Decision approving the PM_{2.5} SIP in part and disapproving it in part. In the Final Decision, EPA extended the South Coast’s attainment deadline to April 5, 2015, and approved the PM_{2.5} SIP, with the exception of the contingency measures. *Id.* at 69,928/1, 69,929/2, 69,952/1-2. In particular, EPA found that the Enforceable Commitments satisfied the Agency’s three-factor inquiry for permitting the use of enforceable commitments to close emissions reductions gaps, *id.* at 69,944, and that the Enforceable Commitments address an acceptable percentage of the remaining emission reductions needed for attainment. *Id.* at 69,944/1, 69,951/2; ER-307,

309. In its Technical Support and Response to Comments document, EPA also responded to Petitioners' public comments regarding monitoring and attainment demonstrations in the vicinity of heavily-travelled roadways and highways. *See* ER-325-336.

IV. THE INSTANT LAWSUIT

Petitioners filed this suit on January 9, 2012, challenging EPA's Final Decision to approve the Attainment Demonstration, based on its reliance on Enforceable Commitments to address the Emissions Reduction Gap. Petitioners also challenge EPA's approval of the Attainment Demonstration, due to the lack of PM_{2.5} data collected, and computer modeling of attainment performed, in the vicinity of heavily-travelled South Coast roadways and highways. Petitioners do not challenge any other portion of the Final Decision.

STANDARD OF REVIEW

The standard of review for this case is provided by the Administrative Procedure Act, which provides that a final agency action may not be set aside unless it is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A); *see Vigil v. Leavitt*, 381 F.3d 826, 833 (9th Cir. 2004) (citing *Alaska Dep’t of Env’tl. Conservation v. EPA*, 540 U.S. 461, 496-97 (2004), and *Arizona v. Thomas*, 824 F.2d 745, 748 (9th Cir. 1987)). This standard “is narrow and a court is not to substitute its judgment for that of the agency.” *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983); *Nw Ecosystem Alliance v. U.S. Fish & Wildlife Serv.*, 475 F.3d 1136, 1140 (9th Cir. 2007)). This standard also is highly deferential and presumes the validity of agency actions so long as “the agency considered the relevant factors and articulated a rational connection between the facts found and the choices made.” *Nw Ecosystem Alliance*, 475 F.3d at 1140 (quoting *Nat’l Ass’n of Home Builders v. Norton*, 340 F.3d 835, 841 (9th Cir. 2003), and *Baltimore Gas & Elec. Co. v. NRDC*, 462 U.S. 87, 105 (1983)).

Deference is strongly warranted where EPA’s decision involves the evaluation of complex scientific issues and data within its technical expertise. *Baltimore Gas & Elec.*, 462 U.S. at 103; *Nw Env’tl. Advocates v. Nat’l Marine Fisheries Serv.*, 460 F.3d 1125, 1133 (9th Cir. 2006) (“[W]e must ‘be mindful to

defer to agency expertise, particularly with respect to scientific matters within the purview of the agency.”) (quoting *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 387 F.3d 989, 993 (9th Cir. 2004), and citing *Anderson v. Evans*, 371 F.3d 475, 489 (9th Cir. 2004)); *Appalachian Power Co. v. EPA*, 135 F.3d 791, 801-02 (D.C. Cir. 1998) (Deference to EPA expertise is particularly warranted “when dealing with a statutory scheme as unwieldy and science-driven as the Clean Air Act.”).

Questions of statutory interpretation are governed by the two-step test set forth in *Chevron U.S.A. Inc. v. NRDC*, 467 U.S. 837, 842-43 (1984). Under the first step, the reviewing court must determine “whether Congress has directly spoken to the precise question at issue.” *Id.* at 842. If congressional intent is clear from the statutory language, the inquiry ends. *Id.* at 842-43. If the statute is silent or ambiguous on a particular issue, the Court must accept the agency’s interpretation if it is reasonable; the agency’s interpretation need not represent the only permissible reading of the statute nor the reading that the Court might originally have given it. *Id.* at 843 & n.11; *Chemical Mfrs. Ass’n v. NRDC*, 470 U.S. 116, 125 (1985); *see also Leslie Salt Co. v. United States*, 55 F.3d 1388, 1394 (9th Cir. 1995).

An agency's interpretation of its own regulations also “[is entitled to] substantial deference,” and may not be overruled “unless an ‘alternative reading is

compelled by the regulation's plain language or by other indications of the [Agency's] intent at the time of the regulation's promulgation.”” *Thomas Jefferson Univ. v. Shalala*, 512 U.S. 504, 512 (1994) (quoting *Gardebring v. Jenkins*, 485 U.S. 415, 430 (1988)); *Fed. Express Corp. v. Holowecki*, 552 U.S. 389, 397 (2008).

SUMMARY OF THE ARGUMENT

Petitioners fail to demonstrate that EPA acted arbitrarily or capriciously when it approved the Attainment Demonstration in the PM_{2.5} SIP that California developed to bring the South Coast into attainment of the 1997 PM_{2.5} NAAQS by April 5, 2015, on two narrow grounds. Petitioners first assert that the Enforceable Commitments in the SIP, which require CARB and the Air District to act on specific emission control measures on a fixed schedule and to achieve reductions of specified tons of PM_{2.5} and its chemical precursors by 2014, are actually unenforceable aspirational goals. This argument lacks merit, because the Enforceable Commitments require CARB and the Air District to act on specific emission control measures on a fixed schedule and to actually achieve reductions of specified tons of emissions of PM_{2.5} and its chemical precursors by 2014. The Enforceable Commitments therefore impose clear, mandatory and nondiscretionary requirements that satisfy EPA's three-part inquiry for the use of enforceable commitments. The Enforceable Commitments also constitute "means," "techniques" and "schedules and timetables" to achieve attainment of the 1997 PM_{2.5} NAAQS authorized by CAA sections 110(a)(2)(A) and 172(c)(6), the sections that specify the types of provisions States should include in their SIPs. Moreover, the Enforceable Commitments can be enforced under the CAA by both the public and EPA.

Second, Petitioners assert that the Control Strategy on which the Attainment Demonstration is based violated the CAA and EPA's implementing regulations (*i.e.*, the Monitoring Rules) and guidance because it is not based on PM_{2.5} monitoring data collected, and attainment-related computer modeling performed, in the vicinity of heavily-travelled South Coast roadways and highways (*i.e.*, at the Microscale or Middle Scale). This argument also lacks merit, because EPA's long-established Monitoring Rules at 40 C.F.R. Part 58 and related EPA guidance instruct States to collect PM_{2.5} data and conduct attainment-related computer modeling at sites that represent "community-wide" air quality, which are not required to include Middle- and Microscale areas in the vicinity of heavily-travelled roadways and highways. In addition, 40 C.F.R. section 58.30(a)(1) *does not permit* States to use Microscale and Middle Scale data to determine attainment of the annual 1997 PM_{2.5} NAAQS absent a special finding that has not been made for the South Coast. Moreover, to the extent Petitioners argue that the Monitoring Rules and 40 C.F.R. section 58.30(a)(1) consequently are not adequately protective of human health, they assert an untimely and improperly-venued challenge to the Monitoring Rules that should be dismissed pursuant to CAA section 307(b)(1), 42 U.S.C. § 7607(b)(1).

For all of these reasons, EPA's approval of the Attainment Demonstration in the PM_{2.5} SIP was not arbitrary, capricious or otherwise contrary to law, and its Final Decision should be upheld.

ARGUMENT

I. EPA'S DECISION TO APPROVE THE ATTAINMENT DEMONSTRATION, WHICH RELIES ON THE ENFORCEABLE COMMITMENTS TO CLOSE THE EMISSIONS REDUCTION GAP, WAS NEITHER ARBITRARY NOR CAPRICIOUS.

EPA's decision to approve the Attainment Demonstration was neither arbitrary nor capricious, because California properly relied upon the Enforceable Commitments (particularly the Tonnage Requirements) to address the Emissions Reduction Gap. Petitioners erroneously assert that the State's commitments to adopt specified future control measures on a fixed schedule and actually achieve specified tons of emission reductions by 2014 are mere aspirational and unenforceable goals, rather than appropriate means, techniques, schedules or timetables for achieving attainment of the PM_{2.5} NAAQS, and they therefore argue that those commitments are not authorized by CAA sections 110(a)(2)(A) and 172(c)(6), 42 U.S.C. §§ 7410(a)(2)(A), 7502(c)(6). *See* Pet.Br. at 27-29, 34-36. However, EPA properly approved the Enforceable Commitments after carefully evaluating them in light of the entire PM_{2.5} SIP and determining that they impose clear, mandatory and non-discretionary requirements that satisfy the Agency's three-part inquiry for SIP commitments; that they constitute appropriate means,

techniques, schedules or timetables for NAAQS attainment; and that they can be enforced by both EPA and the public under the CAA.

For all of these reasons, which EPA clearly articulated in the Final Decision, the Agency's decision to approve the Attainment Demonstration was not arbitrary, capricious or contrary to law and should be upheld.

A. The Enforceable Commitments Impose Clear and Non-Discretionary Requirements on CARB and the Air District, Not Aspirational Goals.

Contrary to Petitioners' allegations, the Enforceable Commitments, including the Tonnage Requirements, are neither unclear nor merely aspirational. Instead, their plain language imposes two distinct, unambiguous and detailed sets of requirements on the Air District and on CARB—under the Tonnage Requirements to actually reduce PM_{2.5}, NO_x, SO_x and VOC emissions by specified tons per day by January 1, 2014, and under the Control Measure Requirements to take action with respect to different sets of Listed Measures on a fixed schedule.

More specifically, the Air District is required both: (1) to adopt and implement the control measures listed on Table 4-2A of its 2007 Air Quality Management Plan according to the schedule set out therein;¹⁴ and (2) actually to achieve emission reductions of 2.9 tons per day (“tpd”) of direct PM_{2.5}, 2.9 tpd of

¹⁴ 76 Fed. Reg. at 69,952/1, 69,954/3; 40 C.F.R. § 52.220(398)(ii)(A)(2).

SO_x and 10.4 tpd of VOC by 2014.¹⁵ *See also supra*, at 19-20. Similarly, CARB is required both: (1) to seek its Board's approval of the control measures listed in Appendix B to its 2011 Progress Report in the years specified therein,¹⁶ and (2) actually to achieve emission reductions of 6.1 tpd of direct PM_{2.5}, 38.1 tpd of SO_x, 33.6 tpd of VOC, and 118.2 tpd of NO_x by 2014.¹⁷ *See also supra*, at 19-20. The plain language of these Requirements also does not contain discretionary terms (*e.g.*, “may adopt,” “up to 10.4 tons,” “on or after 2014,” etc.) that would permit CARB or the Air District to modify or disregard them. Such clear, specific and non-discretionary language cannot credibly be characterized as establishing mere “aspirational goals.”

Significantly, the plain language of the Tonnage Requirements expressly obligates CARB and the Air District to *achieve* the specified tons of emission reductions.¹⁸ “Achieve” is not a defined term or term of art in the Clean Air Act or

¹⁵ 76 Fed. Reg. at 69,942/2, 69,952/1-2, 69,954/3; 40 C.F.R. § 52.220(398)(ii)(A)(2).

¹⁶ 76 Fed. Reg. at 69,952/1-2, 69,955/1; 40 C.F.R. § 52.220(400)(ii)(B)(1).

¹⁷ 76 Fed. Reg. at 69,942/2-3, 69,952/1-2, 69,954/2; 40 C.F.R. § 52.220(397)(ii)(A)(2).

¹⁸ 40 C.F.R. §§ 52.220(397)(ii)(A)(2), (398)(ii)(A)(2); *see* 76 Fed. Reg. at 69,952/1-2 (numbered paras. 6, 7).

the Final Decision, and so must be accorded its ordinary or dictionary meaning of “finally completing” or “accomplishing” when construing the Tonnage Requirements.¹⁹ See *Warmerdam*, 539 F.3d at 1071; *Bayview*, 366 F.3d at 698 (citing *Crown Pacific v. Occupational Safety & Health Review Comm’n*, 197 F.3d 1036, 1038 (9th Cir. 1999)). The plain meaning of the Tonnage Requirements therefore is that CARB and the Air District must *actually accomplish*, not simply attempt or make progress towards completing, the specified emission reductions by 2014. Therefore, any Tonnage Requirement that is not fulfilled will constitute a SIP violation, subjecting California to a potential citizen suit or EPA enforcement action. See 76 Fed. Reg. at 69,942/2-3; *supra* at 14-15; *infra* at 43-45.

Contrary to Petitioners’ allegations, the plain language of the Tonnage Requirements also is clearly distinguishable from the “aspirational objective[s]” in the ozone control measure this Court examined in *Bayview*. 366 F.3d at 692; see e.g., ER-340-42. In that case, this Court assessed a California Bay Area control measure designed to increase public transit ridership, for which corresponding “emission reduction *estimates* [were] predicated on a 15% ridership increase” but for which “[t]he actual [ridership] *target* would be determined after consultation with the transit operators.” *Bayview*, 366 F.3d at 695-96 (emphasis added). The

¹⁹ *Webster’s Online Dictionary* (2012) (“To carry on to a final close; to bring out into a perfected state; to accomplish”; “to get or attain as the result of exertion.”).

Bay Area implemented the control measure, but was unable to increase ridership by more than 12.5%.

When asked to affirm a district court order enforcing the 15% figure, this Court held that, when construing a SIP provision, “We start with the plain language . . . [and] give effect to the natural and plain meaning of its words.” *Id.* at 698 (citing *Crown Pacific*, 197 F.3d at 1038). The Court then found that “[n]o provision . . . actually stated that the [State] was required to increase ridership by any specific amount” and that “[a]greeing to establish a ridership ‘target’ is simply not the same as promising to attain that target.” *Id.* This Court therefore held that the plain language of that provision did not *obligate* the State to achieve a 15% ridership increase, making that 15% figure “an unenforceable, aspirational objective.” *Id.* at 699 n.3.

In contrast, the plain language of the Tonnage Requirements obligates CARB and the Air District *to achieve* the specified tons of emission reductions. *See* ER-340-42. For that reason alone, they are nondiscretionary requirements and not “aspirational objectives” as Petitioners allege. The Tonnage Requirements also are not expressed as “targets,” and are not tied to any specific control measures for which they could be misconstrued as targets.²⁰ Petitioners’ argument that the

²⁰ 76 Fed. Reg. at 69,944/2 (“CARB’s and the District’s enforceable commitments to additional emissions reductions are expressed in aggregate tonnages and not tied to specific measures”).

Tonnage Requirements are mere “aspirational goals” or targets pursuant to *Bayview* therefore fails.²¹ *See also* 76 Fed. Reg. at 69,942/3-43/1.

B. The Enforceable Commitments Are Means, Techniques, Schedules and Timetables Authorized by CAA Sections 110(a)(2)(A) and 172(c)(6).

Contrary to Petitioners’ allegations, enforceable commitments to adopt future control measures and achieve aggregate tons of emission reductions on a fixed schedule, such as the Enforceable Commitments at issue, are proper elements of the Control Strategies in attainment demonstrations for nonattainment SIPs, such as the PM_{2.5} SIP. Such commitments are clearly authorized by CAA sections 110(a)(2)(A) and 172(c)(6), provisions that describe the required components of SIPs in general and of nonattainment SIPs in particular, respectively:

Each implementation plan . . . shall— (A) include enforceable . . . means or techniques . . . , as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable requirements of this chapter;

42 U.S.C. § 7410(a)(2)(A); and

[Nonattainment] plan provisions shall include enforceable . . . means or techniques . . . , as well as schedules and timetables for compliance, as may be necessary or appropriate to provide for attainment . . . by the applicable attainment date . . .

²¹ Petitioners’ reference to emission levels in reasonable further progress graphs (Pet. Br. at 37 n.14) is both inapposite and inexplicable, as neither reasonable further progress demonstrations nor related graphs are implicated in this case. EPA also would not dispute that such levels are unenforceable goals.

Id. § 7502(c)(6); *see BCCA*, 355 F.3d at 839; *Environmental Defense*, 369 F.3d at 209; *see ER-277*, 338-40, 347.

EPA has long construed these provisions to authorize enforceable commitments that satisfy the statutory definition of “schedules and timetables,” and the dictionary definitions of “means” and “techniques.” *BCCA*, 355 F.3d at 840; *Environmental Defense v. EPA*, 369 F.3d at 209; *see* 76 Fed. Reg. at 69,941-42; *ER-277*. The CAA broadly defines schedules and timetables as “a schedule of required measures including an enforceable sequence of actions or operations leading to compliance with an emissions limitation, prohibition or standard.” 42 U.S.C. § 7602(p); *BCCA*, 355 F.3d at 840. The term “means” is defined as ““something by the use or help of which a desired end is attained or made more likely: a[] measure, plan or policy for accomplishing or furthering a purpose,”” while the term “technique” is defined as ““a technical method of accomplishing a desired aim”” or a ““method, way [or] manner.”” *Environmental Defense*, 369 F.3d at 209 (citing Webster’s Third New International Dictionary 1398 (“Means” def’n 6), 2348 (“Technique” def’n 2)).

1. The Enforceable Commitments Satisfy the Definitions of Means, Techniques, Schedules and Timetables.

The Control Measure Requirements to act on specific Listed Measures (*e.g.*, rules modifying California’s reformulated fuel program and reducing NO_x emissions from boilers and steam generators) on a fixed schedule, and the Tonnage

Requirements to achieve specified tons of emission reductions by January 1, 2014, fall squarely within the definitions of all of those terms. They clearly are “an enforceable sequence of actions leading to” closure of the Emissions Reduction Gap that will allow the South Coast to attain the 1997 PM_{2.5} NAAQS, thereby satisfying the definition of a “schedule and timetable.” They also are properly characterized as a “measure, plan or policy,” a “technical method” and a “method [or] way” for accomplishing that same result, thereby satisfying the definitions of “means” and “techniques.” *See also* 76 Fed. Reg. at 69,941-42.

As the Second and Fifth Circuits observed in *Environmental Defense v. EPA* and *BCCA Appeal Group v. EPA*, respectively, because the CAA itself is silent as to whether enforceable commitments constitute such means, techniques, schedules or timetables, EPA’s construction of CAA sections 110(a)(2)(A) and 172(c)(6) to authorize particular sets of enforceable commitments must be upheld so long as it is reasonable. *BCCA*, 355 F.3d at 840; *Environmental Defense*, 369 F.3d at 209; *see* 76 Fed. Reg. at 69,941/2-3. Because the Enforceable Commitments fall squarely within the pertinent statutory and dictionary definitions, EPA reasonably concluded that the Enforceable Commitments are “appropriate means or techniques . . . as well as schedules and timetables for compliance” authorized by Sections 110(a)(2)(A) and 172(c)(6), and therefore are appropriate elements of the Control Strategy in the Attainment Demonstration for the PM_{2.5} SIP.

2. CAA Section 110(k)(4) Is Inapposite.

Petitioners' assertion that SIPs containing enforceable commitments should only be temporarily and conditionally approved under CAA section 110(k)(4) is erroneous. *See* Pet. Br. at 30. While CAA section 110(k)(4) mentions enforceable commitments, it is well established that this provision does not provide the only basis for approving them, and it does not bar the kind of SIP approval in part and disapproval in part under CAA section 110(a)(2)(A) that EPA issued for the PM_{2.5} SIP. *See BCCA*, 355 F.3d at 839 n.28 (rejecting argument that 110(k)(4) bars EPA from approving SIPs with enforceable commitments pursuant to 110(a)(2)(A)); *Environmental Defense*, 369 F.3d at 211 ("The existence of the [Section 110(k)(4)] conditional approval procedure does not foreclose final approval of a plan that, while containing commitments, is nevertheless sufficiently comprehensive."); 76 Fed. Reg. at 69,941/1-3; ER-338-39, 347. EPA therefore properly approved the portions of the PM_{2.5} SIP that rely upon the Enforceable Commitments to close the Emissions Reduction Gap pursuant to CAA sections 110(a)(2)(A) and 176(c)(6), and Petitioners' contrary arguments should be rejected. *See also* 76 Fed. Reg. at 69,941.

3. The Control Measure Requirements Are an Enforceable Strategy for Fulfilling the Tonnage Requirements.

Petitioners' argument that the Tonnage Requirements are merely aspirational goals because no strategy for fulfilling them is included in the Enforceable

Commitments also is unavailing. Pet Br. at 26-27, 29-30, 33-36. The Tonnage Requirements and the Control Measure Requirements overlap to the extent the Listed Measures achieve emission reductions that can satisfy the Tonnage Requirements, and the record is clear that CARB and the Air District expected to fulfill their respective Tonnage Requirements through Listed Measures. ER-283-85 (Tables F-3, F-4), 294-97 (Tables F-6, F-7); 76 Fed. Reg. at 69,944/1-2. EPA expressed that same understanding in both the Proposed and Final Decisions:

Although CARB's and the District's enforceable commitments . . . are expressed in aggregate tonnages and not tied to specific measures, both CARB and the District have provided a list of potential measures that may achieve the additional reductions needed to attain the standards, together with expeditious rule development, adoption, and implementation schedules.

76 Fed. Reg. at 69,944/2 (Final Decision); *see also* 76 Fed. Reg. 41,562, 41,576, 41,577 (July 14, 2011) (Proposed Decision). Or put a different way:

The . . . intent of the commitments is clear; and *the strategy of adopting measures to achieve the required reductions* is completely within CARB's and the District's control. . . . CARB and the District identify specific emission reductions that they could achieve, how they could be achieved and the time by which these reductions will be achieved, *i.e.*, by 2014.

76 Fed. Reg. at 69,943/1 (emphasis added); *see id.* at 69,942/1-2. Therefore, there can be no doubt that the Control Measure Requirements constitute an enforceable “strategy” for fulfilling the Tonnage Requirements.²²

²² In the event of a shortfall, CARB and the Air District also must adopt or identify additional control measures that will actually (footnote continued...)

This strategy goes much further than those used by Texas and New York, two States whose tonnage commitments were upheld by the Fifth and Second Circuit Courts of Appeal, respectively. The Texas commitment upheld in *BCCA Appeal Group v. EPA* was based on a submission that merely discussed potential “soon-to-be-available, cutting-edge technologies” that could not even be developed without “further scientific study.” 355 F.3d at 841 & n.30. Texas therefore had to commit to a two-tiered schedule that would enable it to first “explor[e], develop[] and assess[]” the unspecified and as-yet-undeveloped technologies, and later implement those that could achieve the necessary pollutant reductions. *Id.* The New York commitments upheld in *Environmental Defense v. EPA* do not even include a list of control measures, and EPA’s approval was merely “predicated on its understanding that New York intended to adopt the control measures recommended by the Ozone Transport Commission.” 369 F.3d at 209.

CARB and the Air District have actually pursued the Control Measure Requirement strategy since 2007. Following the submission of the PM_{2.5} SIP, both agencies timely took the required actions for their Listed Measures, and sought to

achieve the remaining tons of SIP-creditable reductions by January 1, 2014. *See* 76 Fed. Reg. at 69,950/1-2 (above Table 3); *supra* at 17. This does not render the Tonnage Requirements uncertain or unenforceable, however. *Citizens for a Better Env’t v. Deukmejian*, 731 F. Supp. 1448, 1457 (N.D. Cal. 1990) (“the basic commitment to adopt and implement additional measures, should the identified conditions occur, constitutes a specific strategy, fully enforceable in a citizens action, although the exact contours of those measures are not spelled out”), *reconsideration granted in part*, 746 F. Supp. 976 (N.D. Cal. 1990).

have them approved into the PM_{2.5} SIP so that related emission reductions could be used to satisfy the Tonnage Requirements. *See* 76 Fed. Reg. at 69,951/1, 69,948-49 (Table 1 (col. “Current SIP approval status”), Table 2 (col. “Current status”)); *supra* at 17-18, 19-20. By the time EPA approved the PM_{2.5} SIP, CARB had adopted all but two of its Listed Measures (both of which had future deadlines); the Air District had adopted all but three of its measures (one with a future deadline and one in process) and already exceeded the emission reductions required by its Tonnage Requirements for VOCs and SO_x; and EPA approvals were either granted or pending for most of the already-adopted measures. 76 Fed. Reg. at 69,944/2, 69,948 & Table 1 (Air District), 69,949 & Table 2 (CARB); *supra* at 17-18, 19-20. EPA therefore reasonably concluded that the Control Measure Requirements constituted an enforceable strategy for accomplishing the Tonnage Requirements—and apparently an effective one—at the time the PM_{2.5} SIP was approved. *Id.* at 69,944/3.

C. The Enforceable Commitments Satisfy All Three Elements of EPA’s Three-Factor Inquiry.

Contrary to Petitioners’ arguments, EPA carefully considered the Enforceable Commitments in the context of the entire PM_{2.5} SIP, and only approved them as part of the Attainment Demonstration after finding that they satisfied all three of the elements of the Agency’s inquiry for SIP commitments submitted in lieu of already-adopted measures: (1) they address a limited amount

of the emission reductions required for attainment; (2) the State will be able to fulfill them; and (3) they must be fulfilled within a reasonable and appropriate amount of time. 76 Fed. Reg. at 69,933/2; *see BCCA Appeal Group*, 355 F.3d at 840; *Environmental Defense v. EPA*, 369 F.3d 193, 209 (2d Cir. 2004). EPA clearly articulated the basis for that determination in the Proposed Rule and Final Decision, and the Agency is entitled to substantial deference as that determination required significant technical expertise and falls squarely within EPA's purview as the administrator of the CAA. *See Nw Env'tl. Advocates*, 460 F.3d at 1133 (quoting *Klamath-Siskiyou Wildlands Ctr.*, 387 F.3d at 993); *Appalachian Power Co.*, 135 F.3d at 801-02 (Deference to EPA expertise is particularly warranted "when dealing with a statutory scheme as unwieldy and science-driven as the Clean Air Act."). That determination therefore should be upheld, and Petitioners' contrary arguments rejected.

1. The Tonnage Requirements Address a Limited Portion of the Emission Reductions the South Coast Must Achieve in Order to Attain the 1997 PM_{2.5} NAAQS.

Contrary to Petitioners' allegations, by the time the PM_{2.5} SIP was approved, the remaining emission reductions needed to fulfill the Tonnage Requirements comprised only a "limited portion" of the required reductions consistent with similar commitments that EPA has historically approved.

To attain the 1997 PM_{2.5} NAAQS, the South Coast must reduce emissions of *four* different pollutants: direct PM_{2.5} and three of its chemical precursors—SO_x, NO_x and VOC. By the time the PM_{2.5} SIP was approved in November 2011, California had achieved sufficient emission reductions through already-adopted emission control measures that the Tonnage Requirements would be satisfied without *any* further SO_x reductions, and with additional reductions comprising only 8% of the required PM_{2.5} reductions, 7% of the required VOC reductions, and 11% of the required NO_x reductions. 76 Fed. Reg. at 69,944/1-2, 69,950 (Table 4, Line E); ER-345; *see supra* at 19-20. EPA has historically approved commitments that require reductions comprising up to 10% of the emissions reductions needed for attainment. 76 Fed. Reg. at 69,944; ER-307-8, 315, 344-45. However, the 10% figure does not represent a statutory or regulatory ceiling, and in this instance, taking into account the extent to which CARB and the Air District had adopted measures reducing the Emissions Reduction Gap, EPA determined that “the 11% of NO_x, 7% of VOC and 8% of PM_{2.5} reductions . . . fit within the parameters of a ‘limited’ amount of the reductions needed for attainment” and therefore satisfied the first of the three elements of EPA’s enforceable commitment inquiry. 76 Fed. Reg. at 69,944/2; *see id.* at 69,933/1-2; ER-307-8, 315, 345.

2. California Is Capable of Timely Fulfilling All of the Enforceable Commitments.

When EPA approved the PM_{2.5} SIP in November 2011, it also was clear that California would be capable of fulfilling both the Control Measure and the Tonnage Requirements, thereby satisfying the second element of EPA's inquiry for enforceable commitments. As discussed *supra* at 18 and 19-20, both CARB and the Air District had timely fulfilled nearly all of their Control Measure Requirements; they were expected to timely fulfill the remainder; and the Air District had already met and even exceeded its Tonnage Requirements for SO_x and VOC. *See id.* at 69,944/2. EPA therefore properly found that "the State has preliminarily demonstrated, based on a limited set of measures, that all of the needed SO_x reductions, and approximately 90% or more of the reductions of NO_x, VOC, and PM_{2.5} needed for attainment of the 1997 PM_{2.5} standards in the South Coast have already been achieved." *Id.* at 69,945/1.

Both agencies also had not yet received (but expected to receive in the future) emission reduction credit towards the Tonnage Requirements for some already-adopted Listed Measures, as well as Listed Measures with 2012 and 2013 deadlines. *See* 76 Fed. Reg. at 69,951/1; ER-308, 346-47.

Moreover, CARB's air pollution control program includes emission control measures and programs in addition to the Listed Measures,²³ and both CARB and the Air District have continued to develop still other measures, that California could look to in order to satisfy the Tonnage Requirements. *Id.* at 69,944/2, 69,944/3-45/1, 69,951/1. Emission reductions actually achieved as of January 1, 2014, that are attributable to any such measures EPA approves into the PM_{2.5} SIP or for which EPA grants a CAA section 209, 42 U.S.C. § 7543, preemption waiver, can be used to help satisfy the Tonnage Requirements. *See id.* at 69,944/3, 69,949/1, 69,951/1; ER-301, 308, 346-47. Consequently, when EPA approved the PM_{2.5} SIP in November 2011, it had more than enough information to support its conclusion that California actually could fulfill all of the Enforceable Commitments.

3. The Enforceable Commitments Will Be Fulfilled Within a Reasonable and Appropriate Period of Time.

Finally, the Enforceable Commitments must be fulfilled within a reasonable and appropriate time after EPA's November 2011 approval, thereby satisfying the last element of EPA's enforceable commitment inquiry. The Control Measure Requirements obligated the Air District and CARB to act on the last of their Listed Measures by 2012 and 2013, respectively—primarily between 2007 and 2010. *See*

²³ For example, “ongoing programs that address locomotives, recreational boats, and other measures have yet to be quantified but are expected to reduce NO_x and direct PM_{2.5} emissions in the South Coast by 2014.” 76 Fed. Reg. at 69,944/2.

76 Fed. Reg. at 69,948-49 (Tables 1, 2). The Tonnage Requirements also obligate the Air District and CARB to actually achieve the remaining emission reductions needed to close the Emissions Reduction Gap by January 1, 2014—two years after the Tonnage Requirements were approved in November 2011, and more than a year prior to the April 2015 attainment deadline.²⁴ Consequently, EPA properly concluded that the Enforceable Commitments would be completed within a reasonable and appropriate period of time in the context of the entire PM_{2.5} SIP. *See id.* at 69,944/2-45/1; 76 Fed. Reg. 41,562, 41,577 (July 14, 2011); ER-309, 346-47.

For all of these reasons, which EPA clearly presented and explained in the Proposed and Final Decisions, it is clear that the Enforceable Commitments satisfy all three of the elements of EPA’s inquiry for enforceable commitments.

Petitioners’ contrary argument therefore fails.

D. Both EPA and the Public Can Take Timely and Effective Enforcement Action Under the CAA if California Violates an Enforceable Commitment.

Also contrary to Petitioners’ arguments, EPA properly determined that the Enforceable Commitments, including the Tonnage Requirements, are fully enforceable under the CAA. For the reasons discussed *supra* at 28-34, the

²⁴ This is consistent with the requirement that, “State implementation plan[s] must provide for implementation of all control measures needed for attainment as expeditiously as practicable, but no later than the beginning of the year prior to the attainment date.” 40 C.F.R. § 51.1007(b).

Enforceable Commitments are not aspirational goals, and instead are “measures,” “techniques,” and “schedules or timetables” appropriate to provide for attainment of the 1997 PM_{2.5} NAAQS, that can be enforced under the CAA. If any of the Enforceable Commitments is violated—and none has been to date—EPA may choose among a number of enforcement and administrative measures specified in CAA sections 113 and 179,²⁵ 42 U.S.C. §§ 7413, 7509, and the public may bring a citizen suit under CAA section 304(a)(1), 42 U.S.C. § 7604(a)(1).²⁶ EPA and Petitioners therefore can bring suit: (1) as soon as CARB or the Air District fails to take a required action with respect to a Listed Measure by the specified deadline; (2) if CARB or the Air District fails to implement control measures that achieve sufficient emission reductions by January 1, 2014, to fulfill their respective Tonnage Requirements; or (3) if CARB or the Air District ultimately fails to obtain SIP approval for control measures that actually achieved sufficient emission

²⁵ See *supra* at 14-15. The Enforceable Commitments therefore would be fully enforceable under the CAA even if citizen suits were not permitted.

²⁶ *Sierra Club*, 671 F.3d at 959; *Bayview*, 366 F.3d at 695, 703; *Trustees for Alaska*, 17 F.3d at 1210; *Columbus Ctr.*, 967 F.2d at 770-71; *Friends of the Earth v. Carey*, 535 F.2d 165, 170 (2d Cir. 1976); *Deukmejian*, 731 F. Supp. at 1454; *Coal. for Clean Air*, 1999 WL 33842864, at *2; *Am. Lung Assn of N.J. v. Kean*, 670 F. Supp. 1285, 1289 (D.N.J. 1987); see 76 Fed. Reg. at 69,941/2. But see *Sierra Club v. Korleski*, 681 F.3d 342, 348 (6th Cir. 2012).

reductions by January 1, 2014.²⁷ Consequently, Petitioners and EPA both can enforce all of the Enforceable Commitments under the CAA, and EPA's decision to approve them as such was not arbitrary or capricious.

For all of these reasons, EPA properly determined that the Enforceable Commitments impose clear and non-discretionary requirements that are appropriate means, techniques, schedules and timetables to provide for attainment and are fully enforceable under the CAA. EPA's approval of the Attainment Demonstration based upon them therefore was not arbitrary, capricious or otherwise contrary to law and should be upheld.

II. EPA PROPERLY APPROVED THE ATTAINMENT DEMONSTRATION, WHICH WAS BASED ON MONITORING DATA COLLECTED, AND ATTAINMENT MODELING PERFORMED, OUTSIDE THE VICINITY OF SOUTH COAST HIGHWAYS.

Contrary to Petitioners' allegations, the South Coast properly based the Attainment Demonstration on PM_{2.5} data collected, and attainment-related computer modeling performed, at the Neighborhood Scale rather than in the vicinity of heavily-travelled roadways and highways. Since 1997, the Monitoring

²⁷ *Bayview*, 366 F.3d at 703; *Trustees for Alaska*, 17 F.3d at 1212; *Columbus Ctr.*, 967 F.2d at 769 (“To state a claim under the citizen suit provision a plaintiff must allege a violation of ‘a specific strategy or commitment in the SIP and describe, with some particularity, the respect in which compliance . . . is deficient.’”) (quoting *Council of Commuter Organizations v. Gorsuch*, 683 F.2d 648, 670 (2d Cir. 1982)); *Action for Rational Transit v. W. Side Highway Project by Bridwell*, 699 F.2d 614, 616 (2d Cir. 1983)).

Rules have imposed minimum requirements for state air monitoring networks, and specified where monitors can collect data that is eligible for comparison to the annual and the 24-hour PM_{2.5} NAAQS to determine whether those NAAQS have been attained. Contrary to Petitioners' argument, the plain language of the Monitoring Rules does not require States to conduct monitoring at the Middle Scale or Microscale (*e.g.*, within the immediate vicinity of heavily-travelled roadways) or in the vicinity of dominating local PM_{2.5} sources (*e.g.*, highways and other heavily-travelled roadways). Instead, those long-standing rules specifically instruct States to develop networks that monitor larger, representative "community-wide" monitoring sites that are largely expected to be Neighborhood-Scale locations, and they do not allow States to use Microscale or Middle Scale PM_{2.5} data to demonstrate attainment of the annual PM_{2.5} NAAQS absent a special determination by the EPA Regional Administrator that has not been made for the South Coast. Consequently, there is no merit to arguments based on the false premise that PM_{2.5} monitoring must be performed in the vicinity of South Coast highways and other heavily-travelled roadways, and all of the arguments in Section II of Petitioners' brief should be rejected.

A. EPA's Long-Standing Monitoring Rules Do Not Require States to Collect Near-Highway PM_{2.5} Data, or Use Such Data and Related Modeling to Show Attainment of the 1997 PM_{2.5} NAAQS.

Contrary to Petitioners' allegations, the PM_{2.5} Monitoring Rules and related guidance documents in which EPA construes the CAA's monitoring and attainment demonstration requirements as applied to PM_{2.5}, instruct States to conduct their primary PM_{2.5} monitoring and attainment-related computer modeling at the Neighborhood Scale—not at the Microscale or Middle Scale in the vicinity of heavily-travelled roadways and highways or other dominating sources of fine particulate matter. The Monitoring Rules were first promulgated in 1997 concurrently with the 1997 PM_{2.5} NAAQS, which—unlike the NAAQS for other air pollutants—was specifically designed to protect the public on an average, community-wide basis.²⁸ The 2006 NAAQS, concurrently-issued revisions to the PM_{2.5} Monitoring Rules, and related EPA guidance all were issued with the same

²⁸ The PM_{2.5} NAAQS were “intended to reduce aggregate population risk from both long- and short-term exposures by lowering *the broad distribution of PM_{2.5} concentrations across the community*” to a level slightly below that associated with adverse health effects in epidemiological studies of the relationship between adverse health effects and average, community-wide levels of particulate matter. 61 Fed. Reg. 65,648, 65,657/2 (Dec. 13, 2006) (Dec. 13, 2006) (emphasis added); *see* 62 Fed. Reg. at 38,655-56, 38,665/2-3, 38,671/2, 38,672/2, 38,764; 40 C.F.R. § 50.7 & Pt. 58, App. D, § 2.8.1.2.3 (1997).

goal,²⁹ which is directly contrary to the arguments in Section II of Petitioners' brief.

1. The Monitoring Rules Do Not Require States to Collect Data in the Vicinity of Heavily-Travelled Roadways and Highways.

To ensure that state monitoring networks collect PM_{2.5} exposure data comparable to that used in the studies on which the NAAQS were based, the PM_{2.5}-specific portions of the Monitoring Rules provide that network monitors collecting PM_{2.5} data “must be sited to represent community-wide air quality” and “will typically be at neighborhood or urban scale.” 40 C.F.R. Pt. 58, App. D, § 4.7.1(b); *see id.* § 1.2(d) & Table D-1 (same in general monitoring provisions). They also define Neighborhood Scale areas to be several square kilometers in size, and to have homogeneous PM_{2.5} levels and land uses. 40 C.F.R. Pt. 58, App. D, §§ 1.2(b)(3), 4.7.1(b)(4). Urban Scale areas are defined to be even larger. *Id.* § 4.7.1(b)(5).

In contrast, the Monitoring Rules define Microscale and Middle Scale areas to be much smaller (up to 100 meters and a half of a kilometer, respectively), and potentially include areas located in the vicinity of traffic corridors where people live near roadways or where the public is exposed to maximum PM_{2.5}

²⁹ While the 2006 NAAQS is not at issue in this case, the applicable version of the Monitoring Rules includes the 2006 revisions.

concentrations from mobile sources. *Id.* §§ 1.2(b)(1)-(2), 4.7.1(b)(4). The “near highway” areas of concern to Petitioners, which are markedly smaller than several square kilometers and whose PM_{2.5} levels are dominated by highway-related emissions that vary significantly over short distances, therefore are Microscale or Middle Scale areas, rather than Neighborhood or Urban Scale areas in which the Monitoring Rules require the States to collect PM_{2.5} data. *See e.g.*, ER-331-32.

When EPA amended the Monitoring Rules in 2006, the Agency responded to public comments seeking mandatory monitoring in the vicinity of highways by expressly declining to require such monitoring for either the annual or the 24-hour PM_{2.5} NAAQS on the grounds that it was inconsistent with the community-oriented area-wide protection the NAAQS was intended to provide.³⁰ *See* ER-331-

³⁰ *See* 71 Fed. Reg. at 61,264 (2006):

In the [proposed 2006 Monitoring Rule] EPA said it believed that the 1997 rule’s design criteria remained appropriate for implementation of the proposed [annual] PM_{2.5} NAAQS, . . . because these requirements effectively ensured that monitors are placed in [Neighborhood Scale] locations that appropriately reflect the community-oriented area-wide concentration levels used in the epidemiological studies that support the proposed lowering of the 24-hour PM_{2.5} NAAQS. 71 FR 2742. The *EPA continues to believe this . . .*

While an implication of the final monitoring rule provisions regarding siting of PM_{2.5} monitors is *that States may choose not to monitor microenvironment or middle scale locations where some people are exposed to 24-hour concentrations above the . . . 24-hour NAAQS*, such a result remains *consistent with the community-oriented area-wide level of protection on which the 24-hour PM_{2.5} NAAQS is* (footnote continued...)

32 n.94. Therefore, the Monitoring Rules, from their most general provisions to their most detailed and PM_{2.5}-specific, were expressly intended to—and actually do—require that PM_{2.5} network monitors collect “sample[s] of monitored air” at the Neighborhood Scale (*i.e.*, a few square kilometers of homogeneous PM_{2.5} concentration). *See id.* §§ 1.2(a), 4.7.1(c)(3). Clearly, then, the Monitoring Rules do *not* require PM_{2.5} monitoring in Middle Scale or Microscale areas, including those in the vicinity of heavily-traveled roadways or other dominating local sources of PM_{2.5}. The South Coast therefore is fully compliant with the Clean Air Act and EPA’s Monitoring Regulations construing it when it collects PM_{2.5} monitoring data only at the Neighborhood Scale, which does not include areas in the vicinity of highways.

2. States Ordinarily Are Not Permitted to Demonstrate Attainment of the Annual 1997 PM_{2.5} NAAQS Using Microscale or Middle Scale Data.

Moreover, since 1997, States have not been permitted to compare Microscale or Middle Scale data to the annual PM_{2.5} NAAQS for attainment purposes, absent special circumstances that are not present in the South Coast. That restriction was originally imposed in section 58.14 of 40 C.F.R. Part 50, and later reaffirmed and moved to the Monitoring Rules at 40 C.F.R. § 58.30(a)(1)

premised. Thus . . . it is not appropriate to specifically require any number of monitors to be placed in microenvironment or hot spot locations as one commenter suggested.

when the NAAQS and Monitoring Rules were amended in 2006.³¹ The sole exception—for non-attainment areas where the pertinent EPA Regional Administrator has determined that a number of Microscale or Middle Scale monitoring sites collectively “represent many such areas throughout a metropolitan area”—does not apply in the South Coast, because no such determination has been made. *See* ER-330, 331-32. The South Coast therefore is *fully* compliant with the Clean Air Act when it demonstrates attainment for the entire South Coast based on Neighborhood Scale PM_{2.5} data and computer modeling (primary and supplemental) at the Neighborhood Scale.

B. The PM_{2.5} Implementation Rule and Modeling Guidance Also Instruct States to Model Attainment at Neighborhood Scale Sites, Not in the Vicinity of South Coast Highways.

Contrary to Petitioners’ arguments at pages 42-46 of their opening brief, EPA’s PM_{2.5}-specific Implementation Rule and supporting Modeling Guidance also instruct the States to model PM_{2.5} levels *at the Neighborhood Scale* consistent

³¹ § 58.30 Special considerations for data comparisons to the NAAQS. . . .
 (a) Comparability of PM_{2.5} data. (1) . . . PM_{2.5} data that are representative, not of areawide but rather, of relatively unique population-oriented microscale, or localized hot spot, or unique population-oriented middle-scale impact sites are only eligible for comparison to the 24-hour PM_{2.5} NAAQS.

40 C.F.R. § 58.30(a)(1). States that nonetheless decide to collect such data are allowed to compare it to the higher 24-hour PM_{2.5} NAAQS.

with the level of protection the 1997 and 2006 NAAQS were intended to provide.³² ER-333-35,³³ 373-74, 379.³⁴ The PM_{2.5} Implementation Rule requires that States prepare attainment demonstrations through modeling that is “consistent with EPA’s modeling guidance,” and the Modeling Guidance explains that future air quality should be estimated *at current monitoring sites*.³⁵ 72 Fed. Reg. at 20,601/2, 20,607/1-3 & n.19; *see* ER-334, 373. The Monitoring Guidance also recommends that States consider supplemental analyses for unmonitored areas that would support the modeled attainment test, primarily by identifying large-scale (*e.g.*,

³² Clean Air Fine Particle Implementation Rule, 72 Fed. Reg. 20,586, 20,601/2 (Apr. 25, 2007) (“The State’s plan will need to project the emissions reduction expected . . . and then conduct modeling to project the level of air quality improvement *in accordance with EPA’s modeling guidance*.”) (emphasis added); “Guidance on the Use of Models and Other Analyses for Demonstrating Attainment of Air Quality Goals for Ozone, PM_{2.5}, and Regional Haze,” U.S. EPA Office of Air Quality Planning and Standards (April 2007) (“Modeling Guidance”).

³³ EPA cites to a more complete excerpt from the Modeling Guidance in Respondent’s Excerpts of Record that contains key pages that were omitted from Petitioners’ excerpts.

³⁴ ER-373 (“Future . . . PM_{2.5} concentrations are estimated at existing monitoring sites . . . [and t]he resulting predicted “future concentrations” are compared to the NAAQS.”), ER-374 (“Future PM_{2.5} design values are estimated at existing monitoring sites If all future site-specific PM_{2.5} design values are \leq the concentration specified in the NAAQS, the test is passed.”).

³⁵ “The modeled attainment tests contained in EPA’s modeling guidance are primarily monitor based tests. . . . In most cases, States will run a photochemical grid model to determine the future year predicted PM_{2.5} concentrations at monitors.” 72 Fed. Reg. at 20,607/1.

Neighborhood Scale or larger) NAAQS violations in areas with inadequate monitoring networks. ER-334-35, 365, 387. While the South Coast’s monitoring network is not inadequate, ER-330, 332, the large-scale supplemental analysis that Petitioners criticize at page 44 of their brief is consistent with this recommendation. ER-248-50, 329-36, 416 (“[W]e believe that an unmonitored area analysis conducted at 12km or finer resolution is sufficient to address unmonitored PM_{2.5} for the annual NAAQS.”).

Also contrary to Petitioners’ arguments, the Modeling Guidance *does not* require unmonitored area analyses for small-scale areas, such as Microscale or Middle Scale areas in the vicinity of highways.³⁶ ER-334, 387 (“The purpose of the analysis is to . . . identify areas that might exceed the NAAQS *if monitors were located there.*”) (emphasis added). Consequently, EPA’s approval of the Attainment Demonstration, which did not include supplemental analyses prepared at the Microscale or Middle Scale in the vicinity of heavily-traveled South Coast roadways and highways, was neither arbitrary nor capricious.

³⁶ See 72 Fed. Reg. at 20,607/3 n.19 (“Application of the unmonitored area analysis is limited to locations which are appropriate to allow the comparison of predicted PM_{2.5} concentrations to the NAAQS, *based on PM_{2.5} monitor siting requirements and recommendations.*”) (emphasis added).

C. Petitioners' Arguments That the Monitoring Rules and Attainment Demonstration Are Not Adequately Protective Based on Epidemiological and Monitoring Studies Should Be Dismissed Pursuant to CAA Section 307(b)(1).

Finally, Petitioners' arguments regarding the technical parameters and outcomes of various epidemiology studies, and the public health lessons the Petitioners drew from them, are not relevant to the question before this Court—whether EPA properly approved the Attainment Demonstration that is based in part on data collected and computer modeling performed at the Neighborhood Scale consistent with the Monitoring Rules and related EPA guidance. ER-271-72, 332-33; *see* Pet. Br. at 41-42, 46, 48-49. A single month of monitoring data cherry-picked from a short-term study performed in the vicinity of a South Coast highway is not relevant to the question before the Court either.³⁷ Pet. Br. at ___. Instead, all of that information is relevant to—and Petitioners use it to dispute—whether the Neighborhood Scale PM_{2.5} monitoring required by the Monitoring Rules, and the 40 C.F.R. section 58.30(a)(1) restriction against comparing data collected at the Microscale or Middle Scale to the annual PM_{2.5} NAAQS, are adequately protective of human health.

³⁷ EPA notes that the preliminary results of this short-term study, which are not eligible for comparison to the annual PM_{2.5} NAAQS to demonstrate attainment, indicate that ambient PM_{2.5} levels “will continue to be well below 65 µg/m³,” which is the 24-hour NAAQS. ER-271-72. Because the study area included “the most congested highway in the South Coast basin,” EPA believes that the results reflect a “worst case scenario.” *Id.*

The question whether those regulations are adequately protective of human health, however, was properly raised in public comments regarding EPA's promulgation and reorganization of the Monitoring Rules in 1997 and 2006, *see supra* at n.7, 49 & n.30, and could only have been raised in the D.C. Circuit within 60 days thereafter.³⁸ It cannot be raised six years after the fact in this case in the guise of a challenge to EPA's approval of an Attainment Demonstration that complies with their requirements. 42 U.S.C. § 7607(b); *NRDC v. EPA*, 638 F.3d at 1190.

CONCLUSION

For all of the foregoing reasons, Petitioners' arguments should be denied on the merits and EPA's Final Decision approving the PM_{2.5} SIP should be upheld.

³⁸ EPA also notes that it proposed amendments to the PM_{2.5} NAAQS and the Monitoring Rules as part of an ongoing review of the current NAAQS for particulate matter, and is under a court order to complete that process by December 14, 2012. *See American Lung Ass'n v. EPA*, No. 1:12-cv-00243 (D.D.C. filed Feb. 14, 2012), Docket No. 48, ¶ 3; *see* 77 Fed. Reg. 38,890, 38,904-16 (June 29, 2012). However, even if EPA's final action effects any change to the NAAQS or Monitoring Rules, those change will not be applicable to the Final Decision at issue and this Court's review thereof.

Respectfully submitted,

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STATEMENT OF RELATED CASES

Committee for a Better Arvin v. EPA, Case No. 11-73924 (9th Cir.) and *Committee for a Better Arvin v. EPA*, Case No. 12-71332 (9th Cir.) may be related. Argument II the opening brief in each of those cases appears to raise the same legal issue regarding enforceable commitments that is presented in Argument I in Petitioners' opening brief this case, despite the fact that different agency actions are challenged.

Physicians for Social Responsibility – Los Angeles v. EPA, Case No. 12-70016 (9th Cir.), which is brought by the same Petitioners represented by the same counsel, also may be related. Argument I in the opening brief in that case appears to raise the same legal issue regarding PM_{2.5} monitoring and attainment demonstrations that is presented in Argument II in the opening brief in this case, despite the fact that different agency actions are challenged.

CERTIFICATE OF COMPLIANCE WITH WORD LIMITATION

I certify that pursuant to Rule 32(a)(7)(C) of the Federal Rules of Appellate Procedure and Ninth Circuit Rule 32-1, the attached brief is proportionately spaced has a typeface of 14 points, and contains 12,494 words, exclusive of those parts of the brief exempted by Rule 32(a)(7)(B)(iii). I have relied on Microsoft Word's calculation feature.